### The Massachusetts HIV/AIDS Epidemic at a Glance – Detailed Data Tables and Technical Notes:

Table 1. People living with HIV/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV cases by year<sup>2</sup>: 1999-2004, Massachusetts

Year	HIV/AIDS Prevalence	Deaths Among HIV/AIDS	Diagnosis of HIV Infection
1999	12,208	397	1,316
2000	12,978	374	1,144
2001	13,542	424	988
2002	14,196	376	1,030
2003	14,772	320	896
2004	15,289	327	844

<sup>&</sup>lt;sup>1</sup>Number of People living with HIV/AIDS on 12/31 of each year

#### **Technical Notes:**

#### **Estimated Total Number of People Living with HIV/AIDS:**

The U.S. Centers for Disease Control and Prevention (CDC) estimates that about one-quarter of HIV infected persons nationwide do not know they are infected (previous editions of the Epidemiologic Profile estimated that about one-third of HIV-infected persons either did not know they were infected or were not in care). Applying the national estimate to the number of people living with HIV/AIDS in Massachusetts reported to the HIV/AIDS Surveillance Program (N = 15,289 as of December 31, 2004), and adjusting for completeness of reporting, would yield an estimated 5,996 people who are infected with HIV and do not know it, and 2,698 who know their status but have not been reported. Therefore, the estimated total number of people currently living with HIV/AIDS in Massachusetts, including people known to the system as well as those yet to be identified, is in the range of 23,000 – 25,000 people.

<sup>&</sup>lt;sup>2</sup> Reflects year of diagnosis for HIV infection among all individuals reported with HIV infection, with or without an AIDS diagnosis Data source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/05

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<sup>&</sup>lt;sup>1</sup> Fleming PL, Byers RH, Sweeney PA, Daniels D, Karon JM, Janssen RS. HIV prevalence in the United States, 2000. Abstract 11. 9<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Seattle, Washington, February 24-28, 2002

	N	%
People Living with HIV/AIDS	15,289	58%
People Reported with HIV or AIDS who are Deceased	11,223	42%
Total Number of People Reported with HIV Infection or AIDS	26,512	100%

### Who is currently living with HIV/AIDS in Massachusetts?

Please note that previous editions of the Epidemiologic Profile presented people living with HIV/AIDS as of July 1<sup>st</sup> whereas this edition presents people living with HIV/AIDS as of December 31<sup>st</sup> to ensure consistency with national standards.

-	th HIV/AIDS at the end of 2 irth and health service reg	
	People Living with HIV/AID	S on 12/31/04
Gender:	N	%
Male Female	10,871 4,418	71% 29%
Race/Ethnicity:	N	%
White (non-Hispanic) Black (non-Hispanic) Hispanic Asian/Pacific Islander American Indian/Alaska Native Other/Unknown	7,013 4,191 3,789 177 22 97	46% 27% 25% 1% <1%
Place of Birth:	N	%
US Puerto Rico/US Dependency <sup>1</sup> Non-US	10,718 1,872 2,699	70% 12% 18%
Health Service Region <sup>2</sup> :	N	%
Boston HSR Central HSR Metro West HSR Northeast HSR Southeast HSR Western HSR Prison <sup>3</sup> TOTAL <sup>4</sup>	4,985 1,347 1,872 2,170 2,130 1,786 991 <b>15,289</b>	33% 9% 12% 14% 14% 12% 6% <b>100%</b>

Ninety-four percent of people living with HIV/AIDS who were born in a US Dependency were born in Puerto Rico, <1% were born in the US Virgin Islands, and 6% were born in an unknown dependency.

Reflects the health service region (HSR) of a person's residence at the time of report (not necessarily current residence).

<sup>&</sup>lt;sup>3</sup> HSRs are regions defined geographically to facilitate targeted health service planning. While prisons are not an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include persons who were diagnosed with HIV/AIDS while in a correctional facility.

Total includes 8 people living with HIV/AIDS with unknown HSR; Data Source: MDPH HIV/AIDS Surveillance Program

<sup>(</sup>percentages may not add up to 100% due to rounding), Data as of 7/1/05

## Table 4. People living with HIV/AIDS by exposure mode: Massachusetts

People Living with HIV/AIDS on 12/31/04

Exposure Mode:	N	%
Male-to-male sex (MSM)	5,003	33%
Injection Drug Use (IDU)	4,288	28%
MSM/IDU	479	3%
Receipt of Blood/Blood products	127	1%
Pediatric	278	2%
Total Heterosexual Sex (HTSX)	2,056	13%
HTSX w/ an Injection Drug User	879	6%
HTSX w/ Bisexual male	32	<1%
<ul> <li>HTSX w/ a person w/ HIV or AIDS</li> </ul>	1,120	7%
Other HTSX	25	<1%
Total Undetermined/Other	3,058	20%
Presumed Heterosexual <sup>1</sup>	2,235	15%
<ul> <li>Undetermined/Other<sup>2</sup></li> </ul>	823	5%
TOTAL	15,289	100%

Heterosexual sex with a partner of unknown HIV status or risk

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/05

Note: The category of "presumed heterosexual" is used in Massachusetts to re-assign people who are reported with no identified risk but who are known not to have reported any other risks except heterosexual sex with a partner of unknown HIV status or risk. Massachusetts uses this category to distinguish these cases from other undetermined cases about which we know less. Nationally, the Centers for Disease Control and Prevention categorizes "presumed heterosexual" cases as "no identified risk". As such, comparisons of the presumed heterosexual category cannot be made to national data. Caution should be used in interpreting data for presumed heterosexual as it is still not clear what the exposure risk is for people in this category. Although a person may not report other risk behaviors such as injection drug use or male-to-male sex to his/her health care provider, it does not necessarily mean that he/she has not engaged in them. There are many barriers to disclosing HIV risk behaviors in the health care setting such as a tenuous patient-provider relationship or the stigma associated with drug use and male-to-male sex.

<sup>&</sup>lt;sup>2</sup> Includes those still being followed up for risk information, those who have died with no determined risk, those lost to follow-up, and one person with confirmed occupational exposure

Table 5. People living with HIV/AIDS at the end of 2004 by gender and race/ethnicity: Massachusetts									
	Male		Female						
Race/Ethnicity:	N	%	N	%					
White Non-Hispanic	5,660	52%	1,353	31%					

Black Non-Hispanic 2,461 1,730 23% 39% 23% 28% Hispanic 2,546 1,243 Asian/Pacific Islander 134 1% 43 1% American Indian/Alaska Native <1% 12 <1% 10 Not Specified 60 1% 37 1% Total 10,871 100% 100% 4.418

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of

### Who is experiencing differential impact from HIV/AIDS?

#### **Explanation of age adjusted rates**

A "rate" of a disease per 100,000 population is a more precise way to compare groups that have substantially different population sizes rather than relying on the raw number of cases. For example, the number of people living with HIV/AIDS at the end of 2004 who are Hispanic, is 3,789, whereas the number of people living with HIV/AIDS who are white is 7,013. Although the *number* of people living with HIV/AIDS who are Hispanic in Massachusetts is smaller than the number of people living with HIV/AIDS who are white, we also need to consider that there are far fewer people of Hispanic heritage living in Massachusetts than white individuals. Hispanic individuals represent 6% of the Massachusetts population compared to white individuals who represent 82% of the population. So, if HIV/AIDS had the same impact on the Hispanic population of the state as on the white, then there should be almost 12 times as many cases in white individuals, but there are only about twice as many. By calculating a rate which takes into consideration the differences in the population size, it is evident that the number of people living with HIV/AIDS for every 100,000 Hispanic individuals in Massachusetts is much higher than the rate for every 100,000 white individuals. This is called a "crude rate" and is calculated by dividing the number of people living with HIV/AIDS by the entire population (everyone or the sub-population involved) and multiplying by 100,000. (See example 1.A below).

### Example 1.A: Calculation of crude HIV/AIDS prevalence rate for whites, Massachusetts (131.7 per 100,000)

Crude HIV/AIDS prevalence rate for white individuals

= (number of white individuals living with HIV/AIDS ÷ population size of white individuals)×100.000

 $= (7,013/5,326,585) \times 100,000$  $= (0.001316603) \times 100,000$ 

= 131.7

However, sometimes, in addition to the population size being different, the age composition of the populations is different. In Massachusetts, black and Hispanic populations are generally younger than white. The median age of black people (29.7 years) and Hispanic people (24.5 years) is younger than that of white people (38.8 years). Therefore, it is necessary to "age-adjust" the HIV/AIDS prevalence rate to get a true comparison of the impact of the disease across racial/ethnic groups without an effect from the differences in age composition. Age-adjustment of rates minimizes the distortion created by differences in age composition.

Age-adjusted rates are calculated by weighting the age-specific rates for a given population by the age distribution of a standard population. The weighted age-specific rates are then added to produce the adjusted rate for all ages combined. (See example 1.B below).

Example 1.B: Calculation of age-adjusted HIV/AIDS prevalence rate for white individuals, Massachusetts (125.3 per 100,000)

Α	В	С	D	Е
Age group (in years)	# of prevalent HIV/AIDS cases	· · · · · · · · · · · · · · · · · · ·		Age-adjusted rate ((B÷C×D)×100,000))
<1	0	61,381	0.013818	0.00
1-4	1	245,562	0.055317	0.02
5-14	39	675,388	0.145565	0.84
15-24	83	634,387	0.138646	1.81
25-34	579	734,417	0.135573	10.69
35-44	2,913	902,498	0.162613	52.49
45-54	2,558	771,970	0.134834	44.68
55-64	721	491,985	0.087247	12.79
65-74	110	396,458	0.066037	1.83
75-84	6	300,442	0.044842	0.09
85+ years	3	112,097	0.015508	0.04
Total				125.3

To see the effect of age-distribution on prevalence rates see Table 6 below for a comparison of crude and age-adjusted rates by race/ethnicity.

Table 6. Crude and age-adjusted HIV/AIDS prevalence per
100,000 population at the end of 2004 by race/ethnicity and
gender: Massachusetts

State Total:	Crude rate per 100,000	Age-adjusted rate per 100,000
White (pen-Hienanie)	131.7	125.3
White (non-Hispanic) Black (non-Hispanic)	1,245.3	1,341.6
Hispanic	883.8	1,141.6
Asian/Pacific Islander	72.0	75.2
American Indian/Alaskan Native	191.5	179.7
Total prevalence	240.8	235.1
	Crude rate per	Age-adjusted rate
Males:	100,000	per 100,000
White (non-Hispanic) Males	221.2	206.9
Black (non-Hispanic) Males	1,517.3	1,711.5
Hispanic Males	1,202.6	1,652.4
Asian/Pacific Islander Males	111.1	118.2
American Indian/Alaskan Native Males	174.9	166.6
Total prevalence among males	355.4	343.7
	Crude rate per	Age-adjusted rate
Females:	100,000	per 100,000
White (non-Hispanic) Females	48.9	47.7
Black (non-Hispanic) Females	992.2	1,023.3
Hispanic Females	572.7	691.3
Asian/Pacific Islander Females	34.4	34.4
American Indian/Alaskan Native Females	207.8	192.6
Total prevalence among females	134.3	132.6

<sup>&</sup>lt;sup>1</sup> The denominators for prevalence calculations are based on year 2000 population estimates from the MDPH Bureau of Health Statistics, Research and Evaluation Data Source: MDPH HIV/AIDS Surveillance Program

## Who is most at risk of HIV infection and how has this changed over time?

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Massachusetts, before 1999, 1999 - 2004<sup>1</sup>

	Male		Female		
	N	%	N	%	Total
< 1999	15,709	77%	4,639	23%	20,348
1999	914	69%	402	31%	1,316
2000	797	70%	347	30%	1,144
2001	695	70%	293	30%	988
2002	700	68%	330	32%	1,030
2003	626	70%	270	30%	896
2004 <sup>2</sup>	587	70%	257	30%	844

<sup>1</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

Data Source: MDPH HIV/ÁIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/05

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts, before 1999, 1999-2004<sup>1</sup>

	White NH		Black NH		Hisp	Hispanic		API		AI/AN	
	N	%	N	%	N	%	N	%	N	%	
< 1999	11,243	55%	4,752	23%	4,180	21%	101	<1%	26	<1%	20,348
1999	554	42%	393	30%	333	25%	20	2%	3	<1%	1,316
2000	450	39%	392	34%	270	24%	25	2%	2	<1%	1,144
2001	406	41%	321	32%	230	23%	26	3%	2	<1%	988
2002	406	39%	349	34%	240	23%	21	2%	2	<1%	1,030
2003	355	40%	287	32%	228	25%	13	1%	0	0%	896
2004 <sup>3</sup>	318	38%	270	32%	228	27%	12	1%	2	<1%	844

Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

<sup>&</sup>lt;sup>2</sup> 2004 data are preliminary

<sup>&</sup>lt;sup>2</sup> Totals include people with unspecified race/ethnicity

<sup>&</sup>lt;sup>3</sup> 2004 data are preliminary

NH = Non-Hispanic, API = Asian/Pacific Islander, AI/AN = American Indian/Alaskan Native

Table 9. *Mal*es diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts, before 1999, 1999-2004<sup>1</sup>

	White NH		Black NH		Hispanic		API		AI/AN		Total <sup>2</sup>
	N	%	N	%	N	%	N	%	N	%	
< 1999	9,473	60%	3,168	20%	2,932	19%	85	1%	19	<1%	15,709
1999	433	47%	233	25%	227	25%	12	1%	1	<1%	914
2000	362	45%	221	28%	187	23%	23	3%	0	0%	797
2001	332	48%	178	26%	161	23%	21	3%	1	<1%	695
2002	332	47%	183	26%	160	23%	14	2%	2	<1%	700
2003	307	49%	158	25%	146	23%	10	2%	0	0%	626
2004 <sup>3</sup>	274	47%	150	26%	149	25%	7	1%	0	0%	587

<sup>&</sup>lt;sup>1</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

Table 10. *Females* diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts, before 1999, 1999-2004<sup>1</sup>

	White NH		Black NH		Hisp	Hispanic		API		AN	Total <sup>2</sup>
	N	%	N	%	N	%	N	%	N	%	
< 1999	1,770	38%	1,584	34%	1,248	27%	16	<1%	7	<1%	4,639
1999	121	30%	160	40%	106	26%	8	2%	2	<1%	402
2000	88	25%	171	49%	83	24%	2	1%	2	1%	347
2001	74	25%	143	49%	69	24%	5	2%	1	<1%	293
2002	74	22%	166	50%	80	24%	7	2%	0	0%	330
2003	48	18%	129	48%	82	30%	3	1%	0	0%	270
2004 <sup>3</sup>	44	17%	120	47%	79	31%	5	2%	2	1%	257

<sup>&</sup>lt;sup>1</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

<sup>&</sup>lt;sup>2</sup> Totals include people with unspecified race/ethnicity

<sup>&</sup>lt;sup>3</sup> 2004 data are preliminary

NH = Non-Hispanic, API = Asian/Pacific Islander, AI/AN = American Indian/Alaskan Native

<sup>&</sup>lt;sup>2</sup> Totals include people with unspecified race/ethnicity

<sup>&</sup>lt;sup>3</sup> 2004 data are preliminary

NH = Non-Hispanic, API = Asian/Pacific Islander, AI/AN = American Indian/Alaskan Native

Table 11. People diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts, before 1999, 1999-2004<sup>1</sup>

	MSM		MSM/ IDU IDU		HTSX Othe		er	Pres. HTSX <sup>2</sup>		Undeter- mined <sup>3</sup>		Total			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
<1999 1999 2000 2001 2002 2003 2004 <sup>4</sup>	7,573 370 342 301 322 300 262	37% 28% 30% 30% 31% 33% 31%	7,156 388 242 202 172 134 135	35% 29% 21% 20% 17% 15% 16%	835 30 21 23 23 23	4% 2% 2% 2% 2% 3% 1%	2,024 191 186 154 160 98 89	10% 15% 16% 16% 16% 11%	667 10 14 7 7 7	3% 1% 1% 1% 1% 1%	1,357 257 260 220 247 204 191	7% 20% 23% 22% 24% 23%	635 63 75 80 95 123 145	3% 5% 7% 8% 9% 14%	20,348 1,316 1,144 988 1,030 896 844

Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

HTSX = presumed heterosexual; NIR = No Identified Risk

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/05

Table 12. *Males* diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts, before 1999, 1999-2004<sup>1</sup>

	MSM		MSM IDU		MSM/ IDU HTSX				Pres. Undeter- HTSX <sup>2</sup> mined <sup>3</sup>			Total			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
<1999	7,573	48%	5,018	32%	835	5%	562	4%	480	3%	739	5%	502	3%	15,709
1999	370	40%	269	29%	30	3%	64	7%	9	1%	124	14%	48	5%	914
2000	342	43%	165	21%	21	3%	64	8%	12	2%	132	17%	61	8%	797
2001	301	43%	145	21%	23	3%	63	9%		0%	109	16%	51	7%	695
2002	322	46%	120	17%	23	3%	53	8%	6	1%	118	17%	58	8%	700
2003	300	48%	94	15%	23	4%	39	6%	10	2%	85	14%	75	12%	626
2004 <sup>4</sup>	262	45%	86	15%	11	2%	38	6%	5	1%	83	14%	102	17%	587

<sup>&</sup>lt;sup>1</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

MSM = male-to-male sex; IDU = injection drug use; MSM/IDU = male-to-male sex and injection drug use; HTSX = heterosexual sex; Pres. HTSX = presumed heterosexual; NIR = No Identified Risk

<sup>&</sup>lt;sup>2</sup> Heterosexual sex with partners with unknown risk and HIV status

<sup>&</sup>lt;sup>3</sup> Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up

<sup>&</sup>lt;sup>4</sup> 2004 data are preliminary

MSM = male-to-male sex; IDU = injection drug use; MSM/IDU = male-to-male sex and injection drug use; HTSX = heterosexual sex; Pres.

<sup>&</sup>lt;sup>2</sup> Heterosexual sex with partners with unknown risk and HIV status

<sup>&</sup>lt;sup>3</sup> Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up

<sup>&</sup>lt;sup>4</sup> 2004 data are preliminary

Table 13. *Females* diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts, before 1999, 1999-2004<sup>1</sup>

	IDU		HTSX		Other		Pres. HTSX <sup>2</sup>		Undeter- mined <sup>3</sup>		Total
	N	%	N	%	N	%	N	%	N	%	N
<1999	2,138	46%	1,462	32%	288	6%	618	13%	133	3%	4,639
1999	119	30%	127	32%	8	2%	133	33%	15	4%	402
2000	77	22%	122	35%	6	2%	128	37%	14	4%	347
2001	57	19%	91	31%	5	2%	111	38%	29	10%	293
2002	52	16%	107	32%	5	2%	129	39%	37	11%	330
2003	40	15%	59	22%	4	1%	119	44%	48	18%	270
2004 <sup>4</sup>	49	19%	51	20%	6	2%	108	42%	43	17%	257

<sup>1</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

MSM = male-to-male sex; IDU = injection drug use; MSM/IDU = male-to-male sex and injection drug use; HTSX = heterosexual sex; Pres. HTSX = presumed heterosexual; NIR = No Identified Risk

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/05

Table 14. People diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts, before 1999, 1999 – 2004<sup>1</sup>

	US		Puerto R US Depend		Non-U		
	N	%	N	%	N	%	Total
< 1999	15,837	78%	2,437	12%	2,074	10%	20,348
1999	912	69%	164	12%	240	18%	1,316
2000	734	64%	122	11%	288	25%	1,144
2001	619	63%	110	11%	259	26%	988
2002	611	59%	101	10%	318	31%	1,030
2003	566	63%	85	9%	245	27%	896
2004 <sup>3</sup>	534	63%	88	10%	222	26%	844

Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

<sup>&</sup>lt;sup>2</sup> Heterosexual sex with partners with unknown risk and HIV status

<sup>&</sup>lt;sup>3</sup> Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up

<sup>&</sup>lt;sup>4</sup> 2004 data are preliminary

<sup>&</sup>lt;sup>2</sup> Ninety-five percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, and 4% were born in an unknown dependency

<sup>&</sup>lt;sup>3</sup> 2004 data are preliminary

Table 15. Males diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts, before 1999, 1999 – 2004<sup>1</sup>

	US		Puerto R US Depend		Non-U		
	N	%	N	%	N	%	Total
< 1999	12,526	80%	1,740	11%	1,443	9%	15,709
1999	673	74%	116	13%	125	14%	914
2000	539	68%	91	11%	167	21%	797
2001	459	66%	75	11%	161	23%	695
2002	455	65%	67	10%	178	25%	700
2003	436	70%	50	8%	140	22%	626
2004 <sup>3</sup>	418	71%	52	9%	117	20%	587

Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

Table 16. Females diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts, before 1999, 1999 – 2004<sup>1</sup>

	US		Puerto R US Depend		Non-U		
	N	%	N	%	N	%	Total
< 1999	3,311	71%	697	15%	631	14%	4,639
1999	239	59%	48	12%	115	29%	402
2000	195	56%	31	9%	121	35%	347
2001	160	55%	35	12%	98	33%	293
2002	156	47%	34	10%	140	42%	330
2003	130	48%	35	13%	105	39%	270
2004 <sup>3</sup>	116	45%	36	14%	105	41%	257

Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

<sup>&</sup>lt;sup>2</sup> Ninety-five percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, and 4% were born in an unknown

<sup>2004</sup> data are preliminary

<sup>&</sup>lt;sup>2</sup> Ninety-five percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, and 4% were born in an unknown dependency <sup>3</sup> 2004 data are preliminary

## Table 17. People Diagnosed with HIV Infection by Race/Ethnicity<sup>1</sup> and Place of Birth: MA, 2002-2004<sup>2</sup>

	US		Puerto US Depen		Non-	·US	Total
Race/Ethnicity:	N	%	N	%	N	%	N
White NH	999	93%	4	<1%	76	7%	1,079
Black NH	422	47%	4	<1%	480	53%	906
Hispanic	244	35%	266	38%	186	27%	696
APÍ	11	24%	0	0%	35	76%	46

Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers

Table 18. People diagnosed with HIV infection by gender and race/ethnicity: Massachusetts, 2002-2004<sup>1</sup>

	Male		Femal	е	State Total		
Race/Ethnicity:	N	%	N	%	N	%	
White NH	913	48%	166	19%	1,079	39%	
Black NH	491	26%	415	48%	906	33%	
Hispanic	455	24%	241	28%	696	25%	
APÍ	31	2%	15	2%	46	2%	
AI/AN	2	<1%	2	<1%	4	<1%	
Unknown	21	1%	18	2%	39	1%	
Total	1,913	100%	857	100%	2,770	100%	

<sup>&</sup>lt;sup>1</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis; NH = Non-Hispanic, API = Asian/Pacific Islander, AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); Data as of 7/1/05

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis;

<sup>&</sup>lt;sup>3</sup> Ninety-three percent of people diagnosed with HIV infection from 2002-2004 who were born in a US dependency were born in Puerto Rico and 7% were born in an unknown US dependency

NH = Non-Hispanic, API = Asian/Pacific Islander

Table 19. People diagnosed with HIV infection by gender and
exposure mode: Massachusetts, 2002-2004 <sup>1</sup>

	Male		Femal	е	State To	tal
Exposure Mode:	N	%	N	%	N	%
MSM	884	46%	N/A	N/A	884	32%
IDU	300	16%	141	16%	441	16%
MSM/IDU	57	3%	N/A	N/A	57	2%
HTSX	130	7%	217	25%	347	13%
Other	21	1%	15	2%	36	1%
Total Undetermined	521	27%	484	56%	1,005	36%
- Pres. HTSX <sup>2</sup>	286	15%	356	42%	642	23%
- Undetermined <sup>3</sup>	235	12%	128	15%	363	13%
Total	1,913	100%	857	100%	2,770	100%

<sup>1</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis

# Who is infected with HIV but does not yet know? (Concurrent Diagnoses)

Table 20. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by place of birth: Massachusetts, 2002-2004

	HIV and AIDS Diagnosed within 2 Months	All HIV Infection Diagnoses	% Diagnosed with HIV and AIDS within 2 Months
Place of Birth:	N	N	%
US	422	1,711	25%
Puerto Rico/US Dependency <sup>1</sup> Non-US	74 289	274 785	27% 37%
TOTAL	785	2,770	28%

<sup>&</sup>lt;sup>1</sup> Ninety-three percent of people diagnosed with HIV infection from 2002-2004 who were born in a US dependency were born in Puerto Rico and 7% were born in an unknown US dependency Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/05

<sup>&</sup>lt;sup>2</sup> Heterosexual sex with partners with unknown risk and HIV status

<sup>&</sup>lt;sup>3</sup> Includes those still being followed up for risk information, those who have died with no determined risk, those lost to follow-up MSM = Male-to-male sex, IDU = Injection Drug Use, HTSX = Heterosexual Sex, Pres. HTSX = Presumed Heterosexual Sex, NIR = No Identified Risk, N/A = Not Applicable

### How have patterns of AIDS diagnoses changed over time?

Table 21. Reported AIDS cases, by race/ethnicity and year of diagnosis: Massachusetts, 1985 - 2004<sup>1</sup>

	White	NH :	Black	NH	Hispa	anic	AF	Pl	AI/A	۸N	Total <sup>2</sup>
	N	%	N	%	N	%	N	%	N	%	N
1985	155	69%	49	22%	21	9%	1	<1%	0	0%	226
1990	664	62%	235	22%	172	16%	4	<1%	2	<1%	1,079
1995	750	54%	310	22%	326	23%	5	<1%	5	<1%	1,399
1996	576	50%	297	26%	276	24%	7	1%	4	<1%	1,161
1997	407	44%	276	30%	221	24%	12	1%	0	0%	917
1998	412	43%	305	32%	230	24%	13	1%	0	0%	961
1999	406	44%	241	26%	253	28%	12	1%	2	<1%	915
2000	290	38%	245	32%	214	28%	18	2%	1	<1%	768
2001	291	42%	218	32%	171	25%	9	1%	1	<1%	690
2002	245	38%	221	34%	163	25%	13	2%	2	<1%	644
2003	201	38%	180	34%	143	27%	8	2%	0	0%	532
2004 <sup>1</sup>	202	39%	166	32%	150	29%	4	1%	1	<1%	523

<sup>2004</sup> data are preliminary

<sup>2</sup> Total includes people of unspecified race/ethnicity

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/05

Table 22. Reported AIDS cases by exposure mode and year of diagnosis: Massachusetts, 1985-2004<sup>1</sup>

	MSM ID		MSM/ IDU IDU			нт	HTSX Other			Pres. HTSX <sup>2</sup>		Undeter- mined <sup>3</sup>		To- tal	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
4005	4.40	000/		4.407	4.0	=0/	_	201	4.0	00/		00/	•	40/	200
1985	142	63%	32	14%	12	5%	1	3%	13	6%	17	8%	3	1%	226
1990	479	44%	343	32%	45	4%	74	7%	58	5%	53	5%	27	3%	1,079
1995	436	31%	579	41%	63	5%	163	12%	36	3%	69	5%	53	4%	1,399
1996	353	30%	444	38%	36	3%	171	15%	34	3%	73	6%	50	4%	1,161
1997	243	26%	366	40%	34	4%	123	13%	22	2%	80	9%	49	5%	917
1998	255	27%	344	36%	28	3%	122	13%	18	2%	143	15%	51	5%	961
1999	227	25%	363	40%	25	3%	113	12%	4	<1%	156	17%	27	3%	915
2000	166	22%	264	34%	14	2%	129	17%	11	1%	149	19%	35	5%	768
2001	162	23%	205	30%	25	4%	107	16%	13	2%	134	19%	44	6%	690
2002	160	25%	175	27%	19	3%	102	16%	5	1%	132	20%	51	8%	644
2003	125	23%	145	27%	13	2%	78	15%	8	2%	106	20%	57	11%	532
2004 <sup>1</sup>	131	25%	128	24%	12	2%	57	11%	7	1%	117	22%	71	14%	523

<sup>&</sup>lt;sup>1</sup>2004 data are preliminary

### Who is dying with HIV/AIDS and how has this changed over time?

The death data presented in this analysis includes all deaths among people reported with HIV infection and those with AIDS in Massachusetts to present a full description of trends in mortality among this population. This includes a small number of deaths from non-HIV related causes such as drug overdoses, suicides, and motor vehicle crashes. Therefore, the total number of annual deaths reported here will vary from the number of HIV-related deaths reported in Massachusetts Deaths by the Massachusetts Department of Public Health Center for Health Information, Statistics, Research and Evaluation.

<sup>&</sup>lt;sup>2</sup> Heterosexual sex with partners with unknown risk and HIV status

<sup>&</sup>lt;sup>3</sup> Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up MSM = male-to-male sex; IDU = injection drug use; MSM/IDU = male-to-male sex and injection drug use; HTSX = heterosexual sex; Pres. HTSX = presumed heterosexual; NIR = No Identified Risk.

Table 23. Deaths among persons reported v	with HIV infec	ction (non-
AIDS) and AIDS by year of death: Massachi	usetts, 1985 -	2004 <sup>2</sup>
11117	AIDO	T-4-11111/ A

	HIV	AIDS	Total HIV + AIDS
Year	N	N	
			,
1985	<sup>1</sup>	119	1
1990	1	632	<sup>1</sup>
1995	1	1,184	1
1996	1	795	1
1997	<sup>1</sup>	388	1
1998	1	332	1
1999	48	349	397
2000	39	335	374
2001	55	369	424
2002	60	316	376
2003	65	255	320
2004 <sup>2</sup>	58	269	327

<sup>&</sup>lt;sup>1</sup> HIV Reporting was implemented in 1999, therefore there are no data for deaths among people with HIV who did not progress to AIDS during this time period.
<sup>2</sup> 2004 data are preliminary
Data Source MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/05

Table 24. Deaths an	mong persons reported with HIV/AIDS by gender
and vear of death:	Massachusetts, 1999 - 2004

-	Male		Female	Total	
Year	N	%	N	%	N
1999	303	76%	94	24%	397
2000	271	72%	103	28%	374
2001	304	72%	120	28%	424
2002	270	72%	106	28%	376
2003	212	66%	108	34%	320
2004	246	75%	81	25%	327

Table 25. Deaths among persons reported with HIV/AIDS by race/ethnicity and gender and year of death: Massachusetts, 1999 -2004

Total:	19	99	2000		2001		2002		2003		2004	
	N	%	N	%	N	%	N	%	N	%	N	%
White NH	188	47%	189	51%	230	54%	174	46%	163	51%	166	51%
Black NH	97	24%	88	24%	116	27%	113	30%	83	26%	73	22%
Hispanic	107	27%	94	25%	77	18%	85	23%	72	23%	79	24%
APİ	2	1%	2	1%	0	0%	3	1%	1	<1%	5	2%
AI/AN	3	1%	1	<1%	1	<1%	0	0%	0	0%	0	0%
Total N <sup>1</sup>	397	100%	374	100%	424	100%	376	100%	320	100%	327	100%
Males:	1999		2000		2001		2002		2003		2004	
	N	%	N	%	N	%	N	%	N	%	N	%
White NH	151	50%	149	55%	169	56%	135	50%	106	50%	133	54%
Black NH	72	24%	54	20%	77	25%	73	27%	51	24%	53	22%
Hispanic	76	25%	65	24%	57	19%	58	21%	53	25%	53	22%
APÍ	2	1%	2	1%	0	0%	3	1%	1	<1%	5	2%
AI/AN	2	1%	1	<1%	1	<1%	0	0%	0	0%	0	0%
Total N <sup>1</sup>	303	100%	271	100%	304	100%	270	100%	212	100%	246	100%
Females:	1999		2000		2001		2002		2003		2004	
	N	%	N	%	N	%	N	%	N	%	N	%
White NH	37	39%	40	39%	61	51%	39	37%	57	53%	33	41%
Black NH	25	27%	34	33%	39	33%	40	38%	32	30%	20	25%
Hispanic	31	33%	29	28%	20	17%	27	25%	19	18%	26	32%
APİ	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
AI/AN	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%
Total N <sup>1</sup>	94	100%	103	100%	120	100%	106	100%	108	100%	81	100%

<sup>1</sup> Totals includes people of unknown race/ethnicity NH=Non-Hispanic, API=Asian/Pacific Islander, AI/AN=American Indian/Alaska Native Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/05

Table 26. Deaths among persons reported with HIV/AIDS by exposure mode and gender and year of death: Massachusetts, 1999

- 2004												
Total:	19	99	20	000	20	001	20	002	20	03	20	004
	N	%	N	%	N	%	N	%	N	%	N	%
MSM	72	18%	76	20%	91	21%	75	20%	58	18%	62	19%
IDU	213	54%	203	54%	219	52%	203	54%	169	53%	168	51%
MSM/IDU	18	5%	16	4%	20	5%	17	5%	13	4%	17	5%
HTSX	33	8%	25	7%	29	7%	35	9%	36	11%	25	8%
Other	14	4%	13	3%	7	2%	9	2%	6	2%	8	2%
Total Und.	47	12%	41	11%	58	14%	37	10%	38	12%	47	14%
P. HTSX <sup>1</sup>	30	8%	27	7%	29	7%	25	7%	20	6%	25	8%
• Und. <sup>2</sup>	17	4%	14	4%	29	7%	12	3%	18	6%	22	7%
Total N	397	100%	374	100%	424	100%	376	100%	320	100%	327	100%
Males:	1999		2000		2001		2002		2003		2004	
	N	%	N	%	N	%	N	%	N	%	N	%
MSM	72	24%	76	28%	91	30%	75	28%	58	27%	62	25%
IDU	159	52%	135	50%	138	45%	135	50%	105	50%	116	47%
MSM/IDU	18	6%	16	6%	20	7%	17	6%	13	6%	17	7%
HTSX	10	3%	4	1%	12	4%	10	4%	14	7%	13	5%
Other	11	4%	10	4%	2	1%	6	2%	3	1%	7	3%
Total Und.	33	11%	30	11%	41	13%	27	10%	19	9%	31	13%
• P. HTSX <sup>1</sup>	17	6%	16	6%	15	5%	16	6%	13	6%	14	6%
• Und. <sup>2</sup>	16	5%	14	5%	26	9%	11	4%	6	3%	17	7%
Total N	303	100%	271	100%	304	100%	270	100%	212	100%	246	100%
Females:	19	99	20	000	20	001	2002		2003		2004	
	N	%	N	%	N	%	N	%	N	%	N	%
MSM	N/A											
IDU	54	57%	68	66%	81	68%	68	64%	64	59%	52	64%
MSM/IDU	N/A											
HTSX	23	24%	21	20%	17	14%	25	24%	22	20%	12	15%
Other	3	3%	3	3%	5	4%	3	3%	3	3%	1	1%
Total Und.	14	15%	11	11%	17	14%	10	9%	19	18%	16	20%
• P. HTSX <sup>1</sup>	13	14%	11	11%	14	12%	9	8%	7	6%	11	14%
<ul> <li>Und.<sup>2</sup></li> </ul>	1	1%	0	0%	3	3%	1	1%	12	11%	5	6%

MSM=Male-to-male sex; IDU=Injection Drug Use; HTSX=Heterosexual Sex; Und.=Undetermined; P.=Presumed; N/A=Not Applicable Heterosexual sex with partners with unknown risk and HIV status

120

103

100%

100%

100%

106

100%

108

100%

100%

**Total N** 

<sup>&</sup>lt;sup>2</sup> Includes those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 7/1/05